

STATE OF CONNECTICUT  
DEPARTMENT OF TRANSPORTATION

Subject: Standardized Practice for  
Illustrating Test Pit Data  
Developed by the Best  
Practice/Lessons Learned  
Group


Memorandum

Date: August 27, 2012

To: Timothy M. Wilson  
Scott A. Hill  
Chuck S. Harlow

From: James H. Norman  
Engineering Administrator  
Bureau of Engineering and  
Construction

In order to better serve the Department of Transportation's (Department) interest, the Best Practice/Lessons Learned Group has reviewed the current utility test pit information and established a standardized practice for illustrating this data.

Effective immediately, the Department's designers and consultant engineers shall be required to develop a test data table to be shown on the plan sheets (see sample table on attached sheet), reflecting the list of utility test data received for the project. The test pit information shall be in a tabular form on the plan sheets with corresponding specific and detailed information on the cross section sheets. The components of the test pit data table shall be the baseline stations and coordinates for all test pits. Labeling of various types of subsurface utilities shall be shown in the utility test pit data table. A standardized symbol has been adopted and shall be shown in a plan legend to identify the locations of the test pits. The standardized symbol is a square divided into four parts with two shaded diagonal boxes (example: ). The listed test pit information shall provide all parties with relevant information to minimize conflicts during the construction phase of a project.

The Group also evaluated the process and need for the adequate allocation of funding for test pits under the Preliminary Engineering Phase of projects. The findings and recommendation of the Group are that prior to submitting the Test Pit Data Request to Robert Baron of Central Surveys, the Project Manager/Project Engineer will approximate the number of test pits required for the project, at a cost of \$1,500 per test pit, and ensure that this cost has been accounted for under the Preliminary Engineering Phase.

If you have any questions, please contact Sohrab Afrazi at extension 3262.

Attachments

Sohrab Afrazi:mab

cc: Thomas A. Harley - Jennifer Trio

James H. Norman

James A. Fallon - Sohrab Afrazi - Andrzej Mysliwicz - Michael G. Piteo

James P. Connery - Anthony Kwentoh

Hugh Hayward

William W. Britnell - Scott Bushee

Mary Baier - Jan Mazeau

FROM THE DESK OF  
WILLIAM BRITNELL

SEP 04 2012

	F.Y.I.	PLS. DO	PLS. SEE ME
S. BUSHEE	<input checked="" type="checkbox"/>		
M. CALABRESE	<input checked="" type="checkbox"/>		
D. HARMS	<input checked="" type="checkbox"/>		
S. LIBATIQUE	<input checked="" type="checkbox"/>		

COPIES  
sent to Scott

**UTILITY TEST PIT DATA**

WATER (TOWN OF MANCHESTER)								
Test Pit #	BASELINE		NORTHING	EASTING	GROUND ELEVATION (FT)	TOP OF PIPE ELEVATION (FT)	UTILITY DESCRIPTION	RELOCATION ANTICIPATED
	STATION	OFFSET						
W-1	Sta. 121+62.6	5.89 LT	845452.85	1052005.83	110.62	104.95	12" Cast Iron	YES
W-2	Sta. 124+06.4	14.39 LT	845538.04	1052232.55	112.09	106.44	8" Cast Iron	NO
W-3	Sta. 126+04.6	13.40 LT	845626.13	1052407.63	107.46	101.6	8" Cast Iron	NO
W-4	Sta. 221+77.8	7.89 LT	845480.18	1052018.38	110.23	105.35	8" Cast Iron	NO
W-5	Sta. 501+11.6	36.14 LT	845393.41	1052023.66	111.45	107.06	8" Cast Iron	YES
W-6	Sta. 502+90.7	7.55 LT	845409.4	1052187.85	117.4	111.55	8" Cast Iron	YES
W-7	Sta. 1+60.4	22.53 RT	845514.6	1051950.91	110.51	104.9	6" Cast Iron	YES

GAS (CNG)								
Test Pit #	BASELINE		NORTHING	EASTING	GROUND ELEVATION (FT)	TOP OF PIPE ELEVATION (FT)	UTILITY DESCRIPTION	RELOCATION ANTICIPATED
	STATION	OFFSET						
G-1	Sta. 121+88.4	19.88 RT	845434.48	1052037.44	109.8	106.93	8" STEEL	NO
G-2	Sta. 121+88.7	15.49 RT	845438.8	1052036.58	110.3	106.76	8" STEEL	NO
G-3	Sta. 124+69.7	14.21 RT	845537.82	1052302.01	112.54	109.11	4" PVC	NO
G-4	Sta. 125+99.4	14.97 RT	845599.15	1052417.83	108.75	104.94	4" PVC	YES
G-5	Sta. 219+51.5	20.25 LT	845450.51	1051842.75	102.8	99.09	8" STEEL	NO
G-6	Sta. 220+49.3	17.33 LT	845460.1	1051891.18	107.07	103.25	8" STEEL	NO
G-7	Sta. 220+88.4	37.54 LT	845488.68	1051924.62	107.9	104.07	4" STEEL	YES
G-8	Sta. 221+83.5	12.88 LT	845486.34	1052022.81	110.3	106.82	8" STEEL	NO

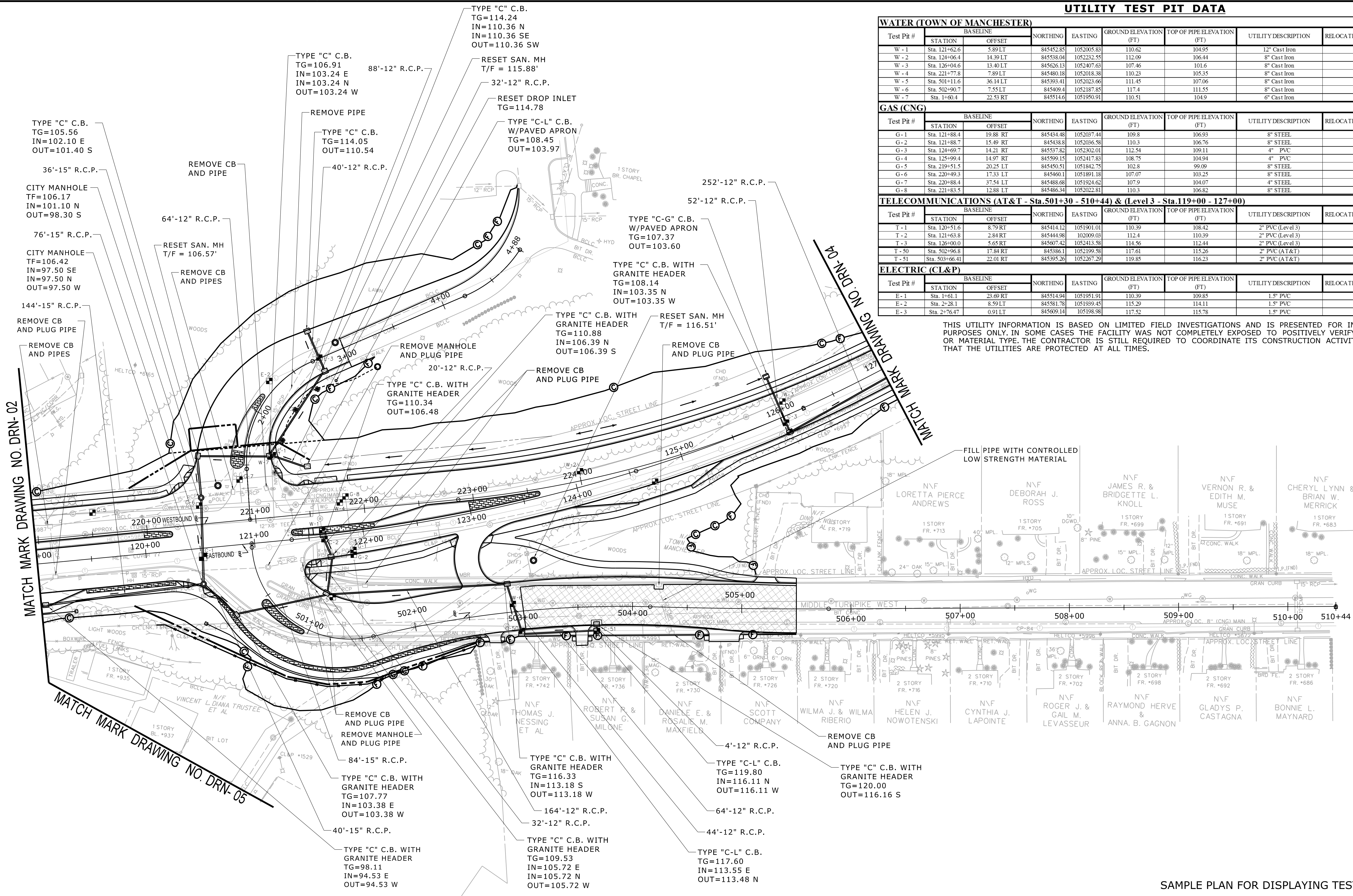
  

TELECOMMUNICATIONS (AT&T - Sta.501+30 - 510+44) & (Level 3 - Sta.119+00 - 127+00)								
Test Pit #	BASELINE		NORTHING	EASTING	GROUND ELEVATION (FT)	TOP OF PIPE ELEVATION (FT)	UTILITY DESCRIPTION	RELOCATION ANTICIPATED
	STATION	OFFSET						
T-1	Sta. 120+51.6	8.79 RT	845414.12	1051901.01	110.39	108.42	2" PVC (Level 3)	YES
T-2	Sta. 121+63.8	2.84 RT	845444.98	102009.03	112.4	110.39	2" PVC (Level 3)	YES
T-3	Sta. 126+00.0	5.65 RT	845607.42	1052413.58	114.56	112.44	2" PVC (Level 3)	YES
T-50	Sta. 502+96.8	17.84 RT	845386.1	1052199.58	117.61	115.26	2" PVC (AT&T)	YES
T-51	Sta. 503+66.41	22.01 RT	845395.26	1052267.29	119.85	116.23	2" PVC (AT&T)	YES

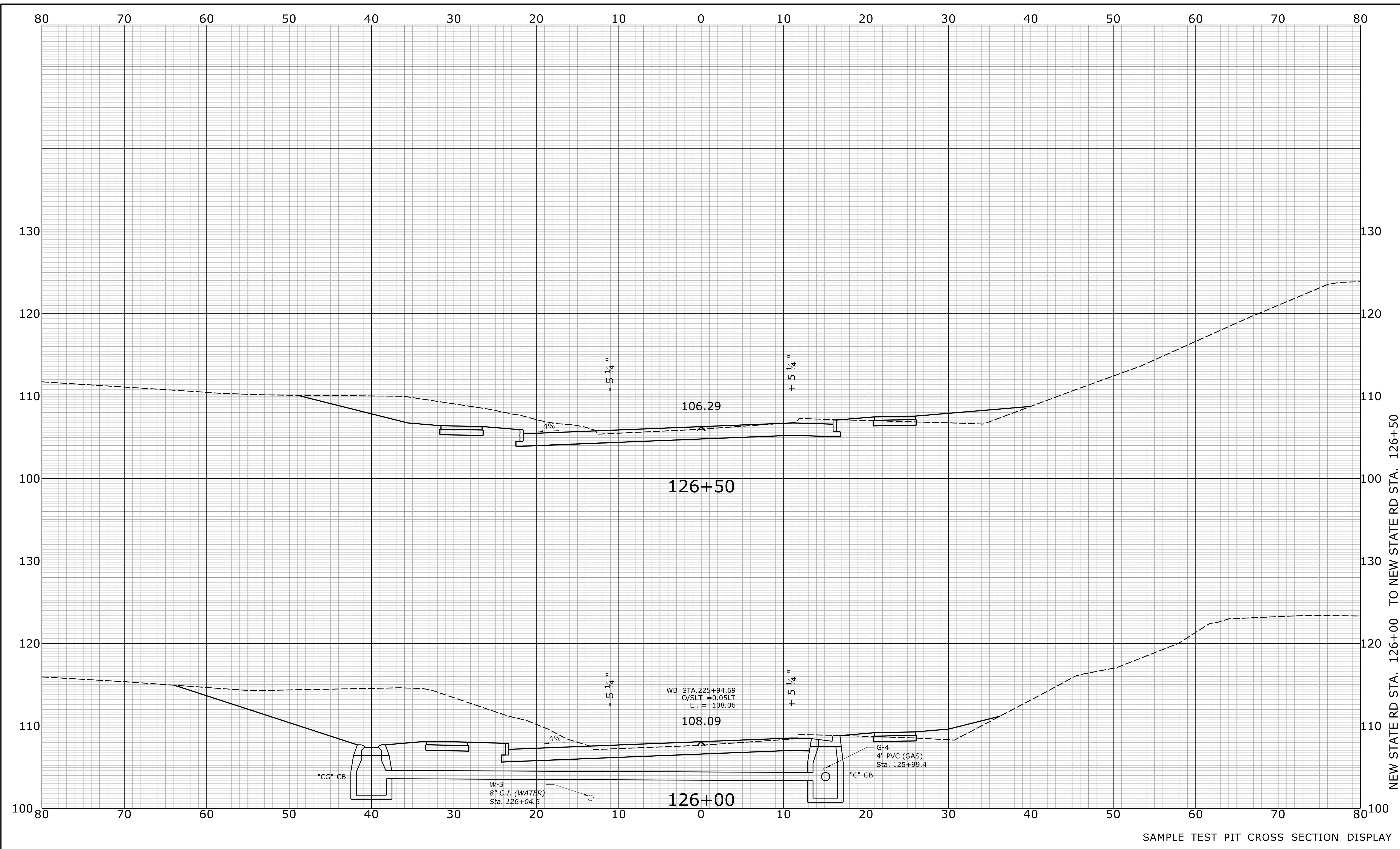
ELECTRIC (CL&P)								
Test Pit #	BASELINE		NORTHING	EASTING	GROUND ELEVATION (FT)	TOP OF PIPE ELEVATION (FT)	UTILITY DESCRIPTION	RELOCATION ANTICIPATED
	STATION	OFFSET						
E-1	Sta. 1+61.1	23.69 RT	845514.94	1051951.91	110.39	109.85	1.5" PVC	YES
E-2	Sta. 2+28.1	8.59 LT	845581.78	1051939.45	115.29	114.11	1.5" PVC	NO
E-3	Sta. 2+76.47	0.91 LT	845609.14	105198.98	117.52	115.78	1.5" PVC	YES

THIS UTILITY INFORMATION IS BASED ON LIMITED FIELD INVESTIGATIONS AND IS PRESENTED FOR INFORMATIONAL PURPOSES ONLY. IN SOME CASES THE FACILITY WAS NOT COMPLETELY EXPOSED TO POSITIVELY VERIFY ITS SIZE OR MATERIAL TYPE. THE CONTRACTOR IS STILL REQUIRED TO COORDINATE ITS CONSTRUCTION ACTIVITIES SO THAT THE UTILITIES ARE PROTECTED AT ALL TIMES.



SAMPLE PLAN FOR DISPLAYING TEST PIT DATA

REV. DATE REVISION DESCRIPTION SHEET NO. Filename: Sample_Test_Pit_Plan.dgn Border Version: 01/05	THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.	DESIGNER/DRAWER: J.N.T. CHECKED BY: P.E.T. SCALE IN FEET 0 40 80 SCALE 1"=40'	STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION ENGINEER: OFFICE OF ENGINEERING APPROVED BY: - DATE: -	OFFICE OF ENGINEERING	PROJECT TITLE: <b>INTERSECTION IMPROVEMENTS          ROUTES 6 &amp; 44 AND NEW STATE ROAD          AT MIDDLE TURNPIKE WEST</b>	TOWN: MANCHESTER DRAWING TITLE: DRAINAGE PLAN	PROJECT NO. DRAWING NO. SHEET NO.
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NEW STATE RD STA. 126+00 TO NEW STATE RD STA. 126+50

SAMPLE TEST PIT CROSS SECTION DISPLAY

REV.	DATE	REVISION DESCRIPTION	SHEET NO.

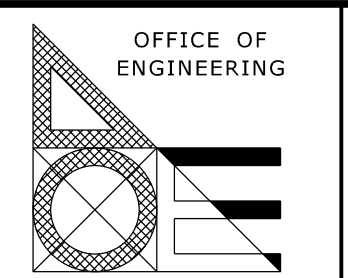
Filename:      Border Version: 02/13/07

THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

DESIGNER/DRAFTER: CKS  
 CHECKED BY: PET  
 SCALE IN FEET  
 0 5 10  
 SCALE 1" = 5'

**STATE OF CONNECTICUT**  
 DEPARTMENT OF TRANSPORTATION

ENGINEER: OFFICE OF ENGINEERING  
 APPROVED BY: -      DATE: -



PROJECT TITLE:  
**INTERSECTION IMPROVEMENTS**  
**ROUTES 6 & 44 AND NEW STATE ROAD**  
**AT MIDDLE TURNPIKE WEST**

TOWN: **MANCHESTER**  
 DRAWING TITLE:  
**CROSS SECTION**

PROJECT NO.  
 DRAWING NO.  
 SHEET NO.

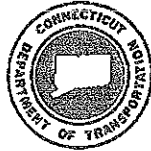
Numbering system for organization of test pits:

<u>Initial Label</u>	<u>Utility</u>
W-1	Water
S-1	Sanitary Sewer
G-1	Gas
T-1	Telecommunications
E-1	Electric
C-1	Cable TV
O-1	Other

Utility Test Pit Symbol



STATE OF CONNECTICUT  
DEPARTMENT OF TRANSPORTATION



*memorandum*

**subject:** Test Pit Data Request

Project No. 0017-0183  
F.A.P. No. (PE) 0069(006)  
Route 69 at Maple & Peacedale  
City of Bristol

**date:** July 23, 2012

**to:** Robert J. Baron  
Manager of Survey Operations  
Bureau of Engineering and Construction

**from:** William W. Britnell  
Transportation Principal Engineer  
Bureau of Engineering and Construction

Please obtain test pit information for the subject project by **Wednesday, October 24, 2012.**

Attached for your information and use are the following:

- Project Location
- Project Description
- Preliminary Design Plan

This project...(a space for additional information and/or project information)...

PE funding has been reviewed and \$300,000 funds are currently available.

If the requested test pit completion date cannot be met, please provide a revised schedule.

Please contact Todd Ingarra, Project Engineer, at (860) 594-3276 should you have any questions or require additional information.

Attachments

Edward B. Sabourin/PMIS  
cc: William W. Britnell - Scott Bushee  
Sohrab Afrazi

Example